# Rec'd PCT/PTO 1-6 MAR 2005 ENT COOPERATION TREAT

(PCT Article 36 and Rule 70)

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## **PCT**

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT 0/528293

Applicant's or agent's file reference	FOR FURTHER ACTIO	N See Notification Preliminary E	on of Transmittal of International xamination Report (Form PCT/IPEA/416)
PCT21055 International application No.	International filing date (day/r	month/year)	Priority date (day/month/year)
			30 October 2002 (30.10.2002)
PCT/US03/33980 International Patent Classification (IPC)	24 October 2003 (24.10.2003) or national classification and IP	C	30 October 2002 (Solizoines)
IPC(7): A61K 31/445; C07D 401/06 and Applicant	1 US CI.: 314/320; 340/208		
MERCK & CO., INC.			
This international prelimin Examining Authority and	nary examination report has is transmitted to the applicar	been prepared by at according to A	this International Preliminary
2. This REPORT consists of	a total of $\frac{2}{2}$ sheets, includi	ing this cover she	et.
which have been ame	ended and are the basis for the	his report and/or	description, claims and/or drawings sheets containing rectifications made inistrative Instructions under the PCT).
These annexes consist of	a total of <u>sheets.</u>		
<ol> <li>This report contains indic</li> </ol>	ations relating to the followi	ng items:	
I Basis of the rep	port		
II Priority			
III Non-establishm	ent of report with regard to	novelty, inventiv	e step and industrial applicability
IV Lack of unity of			
		th record to novel	ty, inventive step or industrial
V Reasoned states applicability; c	itations and explanations sup	porting such state	ement
VI Certain docum			
	in the international applicat	ion	
_	ations on the international ap		
VIII Certain observ	ations on the international ap	ppication	
		Date of completion	of this report
Date of submission of the demand		Sale of completion	or this report
28 May 2004 (28.05.2004)	/ 2	6 October 2004 (24	5.10.2004)
Name and mailing address of the IPEA	/US	Authorized officer	Paul co Pd
Mail Stop PCT, Attn: IPEA/US Commissioner for Patents	$\bigvee$	Cera Chang	DMK ST N
P.O. Box 1450 Alexandria, Virginia 22313-1450	, [,	Dephone No. (57	1) 272-1600
Facsimile No. (703) 305-3230 Form PCT/IPEA/409 (cover sheet)(July	1	V	

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

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International	cation No.
PCT/I IS03/3398	n

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[,		f the report
ı.		ard to the elements of the international application:*
	⊠ the	e international application as originally filed.
	M the	e description:
	na	ages 1-57 as originally filed
	pa	ges NONE , filed with the demand
	pa	ages NONE , filed with the letter of
	⊠ th	e claims:
		ages <u>58-76</u> , as originally filed ages <u>NONE</u> , as amended (together with any statement) under Article 19
	pa	ages NONE ages NONE filed with the demand
		ages NONE, filed with the letter of
		ne drawings: ages NONE, as originally filed
	pa n	NONE filed with the demand
		ages NONE , filed with the letter of
	□ #	he sequence listing part of the description:
		ages NONE as originally filed
	p	ages NONE , filed with the demand
2		ages NONE  regard to the language, all the elements marked above were available or furnished to this Authority in the regard to the language, all the elements marked above were available or furnished to this item, ge in which the international application was filed, unless otherwise indicated under this item.  which is:
	langua	ge in which the international application was first, unless outst with the following language which is:
	I nese	the language of a translation furnished for the purposes of international search (under Rule23.1(b)).
	<b>⊢</b> ⊔"	he language of a translation furnished for the purposes of international formula (under Pule 48 3/h))
	ه ليا	the language of publication of the international application (under Rule 48.3(b)).
	t	the language of the translation furnished for the purposes of international preliminary examination(under Rules
	5	55.2 and/or 55.3).
1	3. With	one paint of 15.3).  regard to any nucleotide and/or amino acid sequence disclosed in the international application, the ational preliminary examination was carried out on the basis of the sequence listing:
١		
١	، لــا	contained in the international application in printed form.
١	1	filed together with the international application in computer readable form.
١		furnished subsequently to this Authority in written form.
١		furnished subsequently to this Authority in computer readable form.
l	_ ITI	The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the
١		international application as filed has been furnished.
١		The statement that the information recorded in computer readable form is identical to the written sequence listing
١		has been furnished.
١	4. 🗖	The amendments have resulted in the cancellation of:
١	۳. ا	
1		the description, pages NONE
١		the claims, Nos. NONE
١	l	the drawings, sheets/fig NONE
١	5. 🗌	This report has been established as if (some of) the amendments had not been made, since they have been considered to go
١		
١	* Replac	
١		cement sheets which have been furnished to the receiving United in response to dark which have been furnished to the receiving United they do not contain amendments (Rules 70.16 and 70.17).  If all office they do not an extended to this report since they do not contain amendments (Rules 70.16 and 70.17).  If all office they do not all office they are the are they are th
١	Any n	epuromens snow vonaming area and annual and a specific and a speci

International cation No.
PCT/US03/33980

	the manufacture inventive step and industrial applicability
II. Non-	establishment of opinion with regard to novelty, inventive step and industrial applicability
. The qu to be i	estannsment of opinion was diverging and invention appears to be novel, to involve an inventive step (to be non-obvious), or estimate the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or estimate the claimed invention appears to be non-obvious), or estimate the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or estimate the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or estimate the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or estimate the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or estimate the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or estimate the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or estimate the claimed invention appears to be novel, to involve an invention appears to be novel, to invention appears to be novel, to involve an invention appears to be novel, to involve an invention appears to be novel, to be not appear to be novel, to be not appear to be novel, to be not appear to
	he entire international application,
$\boxtimes$	slaims Nos. 2, 5 and 7-10
because	Y
	he said international application, or the said claim Nos relate to the following subject matter which does not require international preliminary examination (specify):
	the description, claims or drawings (Indicate particular elements below) or said claims Nos are so unclear that no meaningful opinion could be formed (specify):
	the claims, or said claims Nos are so inadequately supported by the description that no meaningful opinion could be formed.
	no international search report has been established for said claims Nos. 2,5 and 7-10
2. A me	eaningful international preliminary examination cannot be carried out due to the failure of the nucleotid: and/or amino acid ence listing to comply with the standard provided for in Annex C of the Administrative Instructions:
	the written form has not been furnished or does not comply with the standard.
	the computer readable form has not been furnished or does not comply with the standard.
Form PC	TOPE A (AND (Roy III) (July 1998)

Form PCT/IPEA/409 (Box III) (July 1998)

#### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International PCT/US03/3.

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement  STATEMENT  Novelty (N)  Claims 1,3,4,6 and 11-36  YES  NONE  Inventive Step (IS)  Claims 1,3,4,6 and 11-36  YES  Claims NONE  NO  Industrial Applicability (IA)  Claims 1,3,4,6 and 11-36  YES  Claims NONE  NO  CITATIONS AND EXPLANATIONS  Laims 1,3,4,6 and 11-36  YES  Claims NONE  NO  CITATIONS AND EXPLANATIONS  Laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,
STATEMENT  Novelty (N)  Claims 1.3,4,6 and 11-36 YES  NONE  Inventive Step (IS)  Claims NONE  Industrial Applicability (IA)  Claims 1.3,4,6 and 11-36 YES  Claims NONE  NO  Claims NONE  NO  Claims NONE  NO  Claims 1.3,4,6 and 11-36 YES  NONE  NO  NO  CITATIONS AND EXPLANATIONS  Laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior are used in industry.  NEW CITATIONS —  NEW CITATIONS —  NEW CITATIONS —
Novelty (N)  Claims 1,3,4,6 and 11-36 . YES  NONE  Inventive Step (IS)  Claims 1,3,4,6 and 11-36 . YES  Claims NONE  Industrial Applicability (IA)  Claims 1,3,4,6 and 11-36 . YES  NONE  Industrial Applicability (IA)  Claims 1,3,4,6 and 11-36 . YES  Claims NONE  NO  CITATIONS AND EXPLANATIONS  Laims 1,3,4,6 and 11-36 when 2 is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when 2 is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when 2 is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when 2 is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when 2 is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when 2 is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when 2 is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when 2 is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when 2 is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when 2 is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when 2 is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when 2 is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when 2 is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when 2 is C W-R1 is pyrrolidine meet t
Novelty (N)  Claims 1,3,4,6 and 11-36  Inventive Step (IS)  Claims NONE  NO  Claims NONE  Industrial Applicability (IA)  Claims NONE  Claims NONE  Industrial Applicability (IA)  Claims 1,3,4,6 and 11-36  YES  NONE  NO  Claims NONE  NO  CITATIONS AND EXPLANATIONS  Laims 1,3,4,6 and 11-36  YES  NONE  NO  NO  CITATIONS AND EXPLANATIONS  Laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior are used in industry.  NEW CITATIONS  NEW CITATIONS
Inventive Step (IS)  Claims 1,3,4,6 and 11-36  VES NONE  Industrial Applicability (IA)  Claims 1,3,4,6 and 11-36  VES NONE  Claims NONE  NO  Claims NONE  NO  CITATIONS AND EXPLANATIONS Laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36  NEW CITATIONS  NEW CITATIONS
Inventive Step (IS)  Claims 1,3,4,6 and 11-36  NO  Industrial Applicability (IA)  Claims 1,3,4,6 and 11-36  YES  Claims NONE  NO  CITATIONS AND EXPLANATIONS  claims 1, 3, 4, 6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and teach or fairly suggest the specific product and have industrial applicability because the subject matter claimed can be made rused in industry.  NEW CITATIONS —
Claims NONE NU  Industrial Applicability (IA)  Claims 1,3,4,6 and 11-36  Claims NONE  NO  Claims NONE  NO  Claims 1,3,4,6 and 11-36  YES  NO  Claims NONE  NO  CITATIONS AND EXPLANATIONS  Laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior art laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior art laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior art laims 2 is considered and have industrial applicability because the subject matter claimed can be made or used in industry.  NEW CITATIONS —
Industrial Applicability (IA)  Claims 1,3,4,6 and 11-36  CIATIONS AND EXPLANATIONS  Islaims 1, 3, 4, 6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior art leach or fairly suggest the specific product and have industrial applicability because the subject matter claimed can be made r used in industry.  NEW CITATIONS
Industrial Applicability (IA)  Claims 1,3,4,6 and 11-36  Claims NONE  NO  CITATIONS AND EXPLANATIONS  Laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and laims 1,3,4,6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior and law industrial applicability because the subject matter claimed can be made or used in industry.  NEW CITATIONS  NEW CITATIONS
Claims NONE  CITATIONS AND EXPLANATIONS  Islaims 1, 3, 4, 6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set out in PCT Article 33(2)-(4), because the prior art leach or fairly suggest the specific product and have industrial applicability because the subject matter claimed can be made r used in industry.  NEW CITATIONS ————————————————————————————————————
laims 1, 3, 4, 6 and 11-36 when Z is C W-R1 is pyrrolidine meet the criteria set of the subject matter claimed can be made one not teach or fairly suggest the specific product and have industrial applicability because the subject matter claimed can be made rused in industry.  NEW CITATIONS
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